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**DESERT STORM AND ALLIED FORCE:
EXECUTION DISPARITY**

BY

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ABSTRACT

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The degree of political involvement during the planning, execution, and conflict termination of air campaigns Desert Storm and Allied Force impacted each conflict's efficiencies. Critical analysis of both campaigns via the Mowbray Strategy/Process Analysis Model will reveal the orderliness of their respective strategic aspects. Examination of threats to national security interests, national security decision making, military decision making, forces and technologies, unfolds the efficiencies of Desert Storm and deficiencies of Allied Force. Evaluation of Desert Storm and Allied Force using two of the U.S. Army's nine principles of war, objective and unity of command, reveals the strengths of Desert Storm and weaknesses of Allied Force. The critical examination of both campaigns exposes errors for aerospace leaders to guard against in managing future air campaigns.

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DESERT STORM AND ALLIED FORCE: EXECUTION DISPARITY

In the absolutely final analysis, the ability of Coalition ground forces to defeat the Iraqi Army so rapidly and thoroughly may have had little to do with destroying tanks and artillery. There is powerful evidence from 88,000 POWs that air's most significant impact on Iraqi fighting strength was the destruction of morale.

—Lieutenant General Chuck Horner

Lieutenant General Horner delivered these remarks at the termination of Operation Desert Storm, attesting to the vital role of airpower to modern warfare. However, previous conflicts have demonstrated that control of the air does not always guarantee victory. Success in war requires coherent national policies coupled with clear, realistic objectives. These campaign objectives must be agreeable and compatible with the objectives of current and potential allies. James Mowbray provides a Strategy/Process Analysis Model which clearly illustrates the critical nature of the relationship between policy, objectives, and military action. Successful military strategy must support the stated political objectives, stand a reasonable chance of success based upon force structure, and be efficiently executed.¹

Two wars, Desert Storm and Allied Force, separated by approximately eight years, utilized "resources" of a very similar nature, yet employed "ways" in an astoundingly different manner. On 2 August 1990, the first Iraqi tanks attacked Kuwait, forcing the swift unification of a U.S. led Coalition, which was formed to force the complete withdrawal of Iraqi forces from Kuwait. Airpower subsequently played a dominant role in the immediate, unconditional, and complete withdrawal of Iraqi forces.² Then on 24 March 1999, the U.S. and its NATO allies turned from a path of diplomacy to halt Serbian leader Slobodon Milosevic's ethnic cleansing of Kosovar Albanians to military intervention through the air. Allied Force succeeded in inflicting the least collateral damage in air campaign history, and no allied combat casualties occurred in 78 days of continuous fighting. Analysis of these two air campaigns based on Mowbray's Strategy/Process Analysis Model reveals the differences of these two campaign strategy's suitability to the contextual parameters of war. Evaluation of the air strategies of Desert Storm and Allied Force, utilizing selected U.S. Army principles of war, indicates "brilliant" and "flawed" adherence to basic warfighting principles. At first glance, Desert Storm and Allied Force appear extremely similar in nature, but analysis and evaluation of the air campaigns reveals significant differences. Study of the disparate lessons learned from each campaign will provide invaluable insight for future airpower strategists.

BACKGROUND-DESERT STORM

The Iraqi invasion of Kuwait in the summer of 1990 occurred for a variety of reasons. Some blame the Kuwaitis for flaunting their wealth in the face of many poorer neighbors while others point to the invasion as a natural result of Saddam Hussein's bullying and bellicose nature. The first wave of Iraqi tanks entered Kuwait on 2 August 1990, overrunning the country in less than a day. U.S. intelligence sources quickly discovered the Iraqis were massing on Saudi Arabia's borders for an all out invasion. Numerous nations loudly voiced condemnation.³

Iraq possessed a formidable military threat on the eve of its invasion. Saddam Hussein owned the world's fourth largest Army, capable of fielding 5,700 tanks and 3,700 artillery pieces. He also maintained the world's sixth largest Air Force with 950 combat aircraft. Iraq's combat-seasoned defense force comprised 900,000 military troops who were renowned for robotic allegiance to rigid military doctrine. Yet the Iran/Iraq war of the mid-1980s revealed several of Saddam's military inadequacies: rigid leadership, centralized execution, poor training, and low troop morale. The Iraqi military's sheer size and improved training practices since the Iran/Iraq war promised to eliminate some of these problems. Without doubt, Kuwait was overrun by a formidable force. Would Saudi Arabia be next?⁴

Several days after Iraq's invasion of Kuwait, U.S. military assessments of the situation concluded that it was possible to deploy sufficient forces to the region to deter further Iraqi action and, given enough time, to act offensively if required. Iraq's posturing of forces against Saudi Arabia mobilized Saudi leadership, which quickly approved deployment of American troops to Saudi soil. U.S. political leaders wasted no time in embarking on a media campaign to gain international support for opposing the felonious actions of Saddam Hussein.⁵ With global support, the scenario was now set for the formulation of American policy and establishment of objectives to counter Iraqi aggression.

Six days after the invasion of Kuwait by Iraq, President George Bush articulated U.S. objectives for the resolution of the Gulf crisis: first, secure the legitimate, unconditional and complete withdrawal of all Iraqi forces from Kuwait; second, restore the legitimate government of Kuwait; third, assure the security and stability of the Persian Gulf region; and finally, protect American lives.⁶ These goals withstood the test of time - from Operation Desert Shield, the six-month build-up phase, through Desert Storm, the execution phase. President Bush's clear direction served as sound planning guidance for the war planners of United States Central Command (USCENTCOM), the region's military unified command.

General Norman Schwarzkopf, Commander in Chief, USCENTCOM (CINCCENT), immediately requested Pentagon support in planning the strategic air campaign. Colonel John

Warden, Chief of Checkmate, an elite air planning cell within the Pentagon, was assigned the responsibility for developing the initial strategic air campaign. Colonel Warden's plan, "Instant Thunder," provided the Joint Staff's answer to General Schwarzkopf's request.⁷

Instant Thunder designated a series of proposed targets to be attacked over a six-day period. Attacks on these targets would punish Iraqi leadership and influence Saddam Hussein to release his unfounded land grab in Kuwait.⁸ Warden considered enemy leadership the primary "center of gravity," so Instant Thunder was designed to destabilize that leadership through strategic attacks which zeroed in on critical sectors of Iraq's infrastructure, while also destroying key components of Iraq's offensive military capability.⁹ Colonel Warden's reliance on strategic attacks to induce national paralysis, with secondary effects through related systems, mirrors the popular "industrial web" airpower theories of the World Wars era.¹⁰

Colonel Warden's plan met with significant opposition. Lieutenant General Chuck Horner, USCENTCOM's Joint Force Air Component Commander (JFACC), believed Warden's plan failed to tie together the multitude of operational factors that are imperative for execution. Warden made no mention of the Air Tasking Order (ATO), logistics, joint service, or allied agreement issues that were compulsory for air campaign success.¹¹ Warden's plan was also rejected by the Air Force's Tactical Air Command (TAC), who endorsed a strategy of gradual escalation. TAC's escalation strategy consisted of a single strike to signal U.S. resolve, a pause to assess enemy response, and subsequent strikes varying in frequency and size.¹² Following this stringent review, Instant Thunder was approved. Lieutenant General Horner then directed Brigadier General Buster Glosson to transform Checkmate's plan into an executable air campaign.¹³ The air campaign thus served to launch Desert Storm on 17 January 1991.

BACKGROUND-ALLIED FORCE

Kosovo rests in southern Serbia with its mixed population of ethnic Albanians and Serbians. Until 1989, the region enjoyed autonomy within the former Yugoslavia. Then Serbian leader Slobodan Milosevic altered the status of the region, removing its autonomy and bringing it under the direct control of Belgrade, the Serbian capital. Kosovar Albanians adamantly opposed this political shift. In 1998 open conflict surfaced between Serbian and Albanian forces, resulting in the deaths of 1500 Kosovar Albanians and the forcible expulsion of over 400,000 Albanians from their homes. International outrage over the incident ensued, but Milosevic displayed little regard for diplomatic efforts aimed at resolving the issue.

In October 1998, following deterioration of the situation in Kosovo, NATO authorized air strikes in support of diplomatic efforts to force Milosevic's hand and halt the brutal ethnic

cleansing of Albanians. The diplomatic efforts were designed to force the withdrawal of Serbian forces from Kosovo, seek Serbian cooperation in ending the violence, and negotiate the return of Kosovar Albanian refugees to their homes. At the last moment, following diplomatic visits from the Supreme Allied Commander in Europe and other notable dignitaries, President Milosevic agreed to comply. The NATO air strikes were then called off.¹⁴ Milosevic subsequently agreed to deployments of international observers into Kosovo, and the violence subsided significantly.

But peace in Kosovo was shortlived. By late winter 1998 violence had resumed. Following a massacre of Kosovar Albanians in the village of Racak by Serbian military forces, NATO immediately increased its state of readiness and its review of military options. Diplomatic parties were summoned to Rambouillet, France, for negotiations. Negotiations at Rambouillet presented the Federal Republic of Yugoslavia (FRY)/Serbian governments and the Kosovo Albanian delegation with proposals for an equitable agreement calling for interim self-administration of Kosovo. Kosovar Albanians accepted the documents negotiated at Rambouillet. However, it soon became clear that the Serbian side was under strict instructions not to agree. The talks were suspended on 19 March 1998 against a backdrop of Serbian-initiated street violence and the build-up of Serbian forces in and around Kosovo. Milosevic's dismissal of the agreements proposed at Rambouillet, and escalating repression by Serbian security forces, forced the international community to act. NATO Secretary General Javier Solana directed NATO's Supreme Allied Commander Europe (SACEUR) to initiate air operations in the Federal Republic of Yugoslavia. The NATO air campaign, Operation Allied Force, started on 24 March and lasted for 78 days.

Operation Allied Force was originally scheduled as a five-phase operation, based on campaign planning that began in the summer of 1998. The plan, developed primarily by UK and US planners, addressed all typical campaign elements ranging from air superiority to redeployment. Phase 1 introduced air assets into the European region. Phase 2 established air superiority over Kosovo and degraded enemy command and control. Phase 3 called for attacks on military targets in Kosovo and enemy forces providing reinforcements to Serbian troops. Phase 4 then expanded air operations against a wide variety of high value assets throughout FRY. Phase 5 would redeploy forces as required. An optional phase called for a limited air response, relying on cruise missiles to strike selected targets throughout the FRY. This optional phase stood alone and could fuse with Phase 2, as required. So the Allied Force campaign plan was completed. Nineteen democratic nations allied through NATO, with 13 nations contributing their air forces, were determined to succeed.¹⁵

However, the air campaign "blueprint" for Allied Force never materialized, even though NATO planners worked in concert with US European Command (EUCOM) and the five-phase approach was adopted with three initial objectives. These three objectives called for demonstrating the seriousness of NATO's opposition to Belgrade's aggression, deterring Milosevic from escalating his attacks, and damaging Serbia's capacity to wage war against Kosovo.¹⁶ Gaining consensus among 19 democratic nations proved difficult. On 23 April a NATO Summit was convened in Washington to achieve clarity and unity. Alliance leaders then decided to increase the intensity of the air campaign and allowed military leaders to expand the target list. Military planners targeted military-industrial infrastructure, media, and selected strategic targets. The Washington Summit also called for the deployment of additional aircraft to the region.¹⁷

AIR CAMPAIGN DESCRIPTION-DESERT STORM

The Coalition air campaign was set in motion on 16 January 1991, when B-52s from the 2nd Bombardment Wing, armed with conventional air-launched cruise missiles (CALCMs), departed Barksdale AFB, Louisiana. Seven B-52s flew a round trip of 14,000 miles and fired thirty-five CALCMs at eight targets, to include military communications sites and power generation facilities.¹⁸ Tomahawk cruise missiles, launched against Baghdad electrical grids at 2:13 a.m. on 17 January, were the first Coalition munitions launched which could not be recalled.¹⁹ When these missiles left the battleship *Wisconsin*, the Coalition was committed to war. The campaign would end 42 days later with the Iraqi army in retreat and every major Coalition war objective achieved. The devastating effect of the air campaign proved instrumental to Coalition success.²⁰

CENTCOM devised a four-phase offensive plan, the centerpiece of which was the most devastating airpower force in the history of warfare. Over 1800 aircraft from seven different countries would serve as the primary instrument of execution for the first three phases, with ground forces leading the way in the final phase. During Phase I, a strategic air campaign was conducted across Iraq; during Phase II, air supremacy was established in theater; during Phase III, enemy ground combat power in and germane to the Kuwait Theater of Operations (KTO) was continuously bombarded; and during Phase IV, the ground offensive routed the Iraqi forces from Kuwait. The air arm of this operation conducted the largest airlift in history, supported by a massive air refueling fleet, assets including AWACS, JSTARS, Rivet Joint, U-2 and RF-4Cs, and a robust force of attack helicopters. Improved technologies such as stealth, high-speed anti-radiation missiles (HARMS), and precision guided munitions (PGMs) significantly enhanced the lethality of the air campaign.

Desert Shield gave the Coalition time to accumulate a large number of air assets in theater. This robust force afforded the Coalition the ability to execute the first three phases of Desert Storm's air campaign simultaneously.²¹ Over 2700 sorties were flown in the first 24 hours, with coalition forces attacking communications sites, airfields, scuds, and intelligence headquarters. These 2700 sorties consisted of 200 sorties flown against enemy airfields, 175 versus scuds, 750 interdiction sorties against Iraqi Army sites, 430 defensive combat air patrol (CAP) sorties, 650 offensive counter air sorties, and 430 tanker sorties. The daily totals and types of missions flown would continue for the next ten days, then General Horner confidently declared air supremacy on 30 January 1991.²²

The air campaign transitioned to phase III, shaping the battlefield, during the third week of the war. Targeting shifted to Iraqi forces in and around the KTO as General Schwarzkopf prepared to launch the Coalition ground offensive. These air attacks showcased the capability of the A-10 Warthog, F-111 Aardvark, and B-52 Buff. The KTO was divided into "kill box" grids: A-10s attacked armor and artillery, F-111s delivered PGMs against key munitions production facilities, and B-52s carpet bombed entrenched Iraqi infantry. By the start of phase IV, the ground offensive, the combat capability of the Iraqi troops was diminished to 50% of its original capacity within the KTO.²³

The final phase of the air campaign began on 24 February 1991, consisting of air interdiction and close air support (CAS) missions. Support of the ground offensive was key during this phase, so CAS missions in support of troops in contact received top priority. Poor weather and confusion between air and ground commanders over establishment of the fire support coordination line (FSCL) hampered the number of CAS missions flown. Air interdiction missions flown in close coordination with advancing friendly ground troops, led to one of the most publicized coalition skirmishes in Desert Storm. Ground forces, led by Generals Luck, Franks, and Boomer, merged with tank killing A-10s on a major highway intersection west of Kuwait City. This air-land merger forced the hasty evacuation of Iraqi troops and armor. Thousands of confused Iraqi troops, with armor in tow, fled northward in caravans. The caravans were quickly destroyed, and the media subsequently labeled this event as "The Highway of Death". The Coalition declared a cease-fire on 28 February 1991, following four days of uneventful air support for the ground offensive. A decisive military victory had been achieved, due in large part to the success of the Coalition air campaign.²⁴

AIR CAMPAIGN DESCRIPTION-ALLIED FORCE

NATO air strikes, designed to deter Slobodan Milosevic from continuing his attacks on helpless civilians, began at 1900 GMT on 24 March 1999.²⁵ The campaign would end 78 days later as a result of the mounting damage from the intensified air campaign against strategic targets, military-industrial infrastructure, and national command and control targets. Milosevic was thereby constrained to acquiesce to NATO demands without the introduction of an allied ground offensive.

NATO's strategic objectives were formulated late in the planning phase and published as the air campaign commenced. We have noted that these objectives focused on creating conditions to halt Milosevic's ethnic cleansing and damage Serbia's capacity to wage war against Kosovo in the future.²⁶ Throughout 1998, as diplomatic efforts for peaceful solution appeared questionable, NATO Defense Ministers tasked military planners to produce a range of options for military support to the diplomatic process in support of these strategic objectives.²⁷

Allied Force fielded 900 aircraft, two-thirds American, representing 13 of the 19 democratic nations of NATO. The campaign registered 38,000 sorties, 14,000 of which were strike and 24,000 combat support. Allied crews delivered more than 23,000 bombs with less than 20 incidents of collateral damage. Only two air losses occurred to enemy fire, an F-117A Nighthawk and F-16 Fighting Falcon. Fortunately, both pilots were safely recovered and NATO suffered zero casualties to hostile action during Allied Force.²⁸

As previously mentioned, Operation Allied Force was originally planned in five phases under NATO's operational plan. This planning was initiated in June of 1998. Phases 1 and 2 succeeded in establishing air superiority over Kosovo and effectively degraded Milosevic's command and control capability. Phase 3 called for attacks on military targets in Kosovo and FRY forces south of 44 degrees north latitude. During Phase 3, Allied pilots attempted, with minimal success, to strike Serb targets which were providing reinforcement to forces in the field. Phase 3 targeted forces not only in Kosovo, but also in the FRY south of Belgrade. Phase 4, called for expanded air operations against a wide range of "high value" targets. These high value targets were ultimately selected by NATO political leaders.²⁹

Operation Allied Force utilized a wide complement of aircraft types to prosecute the campaign. Massive tanker support was required for transport aircraft delivering forces to theater, for combat aircraft conducting strike operations, and for global attack sorties flown from the continental U.S. by B-2 bombers.³⁰ NATO strike missions were conducted by B-1s, B-2s, B-52s, F-14s, F-15s, F-16s, F/A-18s, F-117s, AV-8s, A-10s, EA-6Bs, AH-64s, and an unprecedented number of unmanned aerial vehicles (UAVs). The U.S. Army, U.S. Navy, U.S.

Air Force, German Air Force, French Air Force, and Royal British Air Force all employed UAV systems in theater to reduce the loss of human life.³¹

Air superiority was quickly achieved, and air attacks clearly had an impact on military operations in the field. Attacks on military personnel forced Serbian forces to remain largely hidden from view, traveling only under limited circumstances. Thus they hindered Serbian ground maneuver effectiveness. Serbian paramilitary forces subsequently intensified the forced expulsion of ethnic Albanians from Kosovo as political pressure tightened on NATO to target fielded Serb forces.³² Weather, terrain, and the chaos of combat hindered the effectiveness of allied aircrews in targeting Serb military forces and equipment. As the war progressed, it became more and more difficult to achieve a coherent targeting strategy. U.S. military leaders encountered difficulty in gaining consensus with the 19 nation NATO team over politically sensitive targets.

The air campaign varied in targeting and intensity through its first 56 days; it appeared to have minimal effect on Milosevic's disposition. Air assets attacked a multitude of targets with pinpoint precision, producing expected bomb damage. However, the bombing had little effect on achieving strategic objectives. Later in the campaign, air attacks on key strategic targets degraded the ability of the FRY military to function. With NATO leaders discussing the possible initiation of a ground campaign and Serbia convinced they could not survive a war of attrition against the 19 nations contributing to the operation, Milosevic acquiesced.³³ Milosevic ultimately accepted to the international community's conditions for ending the bombing.³⁴

AIR CAMPAIGN ANALYSIS

The air campaigns of Desert Storm and Allied Force were designed to halt Saddam Hussein's and Slobodon Milosevic's senseless aggression. Numerous contingencies were considered as planners shaped strategy for both campaigns. The Mowbray Strategy/Process Analysis Model enables us to determine the orderliness of the strategic aspects of each air campaign. The Mowbray model, Figure 1, displays the factors influencing the development and application of a nation's military strategy. The elements of the model are threat, national interests, national security decision-making, policies, allies, national objectives, military decision-making, and strategy. Each element in the model influences adjacent steps, and the arrows show the direction and flow of ideas and events. The width of the arrows proportionately indicates how much weight one element has with relation to the others. The model theorizes that a threat to national interests will trigger national security decision-makers to draft policies which should support national objectives. Further, these national objectives will take into

account allied considerations. Finally, military decision-makers will establish military strategy to counter the threat. Desert Storm and Allied Force will be scrutinized with respect to existing threats to U.S. national security interests, to follow-on policies generated by national security decision-makers, and to resulting strategy formulated by military decision-makers. Both campaigns will also be analyzed with respect to military decision-makers' utilization of available forces and technologies. The overall analysis will disclose U.S. effectiveness in countering the atrocities of Saddam Hussein and Slobodan Milosevic.³⁵

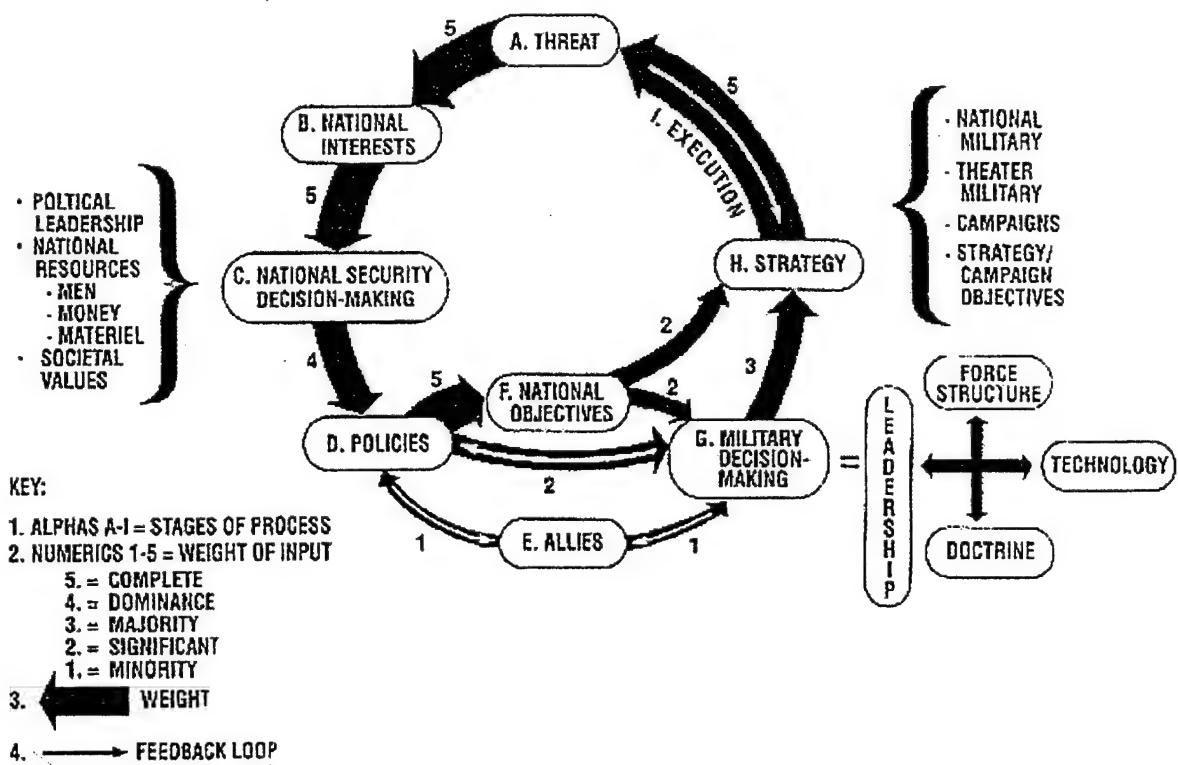


FIGURE 1. MOWBRAY STRATEGY/PROCESS ANALYSIS MODEL

DESERT STORM ANALYSIS

Instant Thunder, in its revised format, supported the military decision-makers' strategy which emerged from the national security decision making process in the weeks immediately following Iraq's invasion of Kuwait. President Bush clearly defined these objectives: withdrawal of Iraq from Kuwait, restoration of the Kuwaiti government, establishment of regional security, and protection of American lives.

THREATS TO NATIONAL SECURITY INTERESTS

President Bush's objectives required policy-makers to counter the threats posed by Iraq to America's national security interests. These threats included the possible invasion of an important ally, regional destabilization due to Iraq's control of a large percentage of the Persian Gulf oil supply, and a reduction in America's global credibility as a nation unable to deter felonious aggression.³⁶

NATIONAL SECURITY DECISION MAKING AND POLICIES

The chief U.S. decision-maker in power at the time of the invasion, President Bush, declared that Iraqi aggression could not be tolerated. Britain's Prime Minister Margaret Thatcher concurred, as did Secretary of Defense Dick Cheney.³⁷ President Bush's guidance to military leaders, regarding the development of a military plan to oust Iraq from Kuwait, clearly revealed his desire to ensure that the mistakes of Vietnam not be repeated and that military field commanders operate clear of micro-managing civilian leadership. Bush emphasized swift conflict termination and minimization of Coalition casualties.³⁸

MILITARY DECISION MAKING AND STRATEGY

CENTCOM retained key members of the Checkmate planning cell to fine tune Instant Thunder into the air campaign of Desert Storm. The planners targeted adversary operational centers of gravity and their critical supporting systems, producing the greatest possible adverse effect to crucial enemy centers.³⁹ Phase 1 of the air campaign called for the gaining of air superiority, followed by air supremacy. This coincided perfectly with USAF doctrine, calling for aerospace control to be a top priority of aerospace forces.⁴⁰ Air supremacy allowed follow on Coalition assets to operate unconstrained over the majority of the Iraqi theater, affording ample opportunity to prepare the battlefield.

By directly attacking Iraqi ground forces in the KTO, the third phase of the air campaign strategy satisfied the ground commander's desire for a measurable reduction of Iraqi combat effectiveness prior to the start of the final ground offensive. Although some airpower purists may contend that greater systems effects could have been produced by strategic attack, campaign planners recognized the importance of a balanced attack scheme.⁴¹ Political realities forced strict guidelines regarding acceptable targets, and there were no "political consequences" resulting from the prosecution of the air campaign.⁴² Additionally, the force applied during the first three phases of the air campaign (designed to reduce Iraqi combat capability) significantly reduced Coalition casualties during the ground offensive.

FORCES AND TECHNOLOGIES

Such new technologies as stealth, PGMs, cruise missiles, AWACS, and JSTARS heavily influenced the outcome of the air campaign. F-117A stealth fighter bombers proved highly effective on Day One of the campaign, as did Tomahawk cruise missiles. Planners were non-plussed that these systems were resting unproven: F-117As had only been used once previously during Operation Just Cause, while Tomahawks had never been employed in battle.⁴³

Desert Storm planners had access to the greatest number of assets in recent airpower history. The sheer numbers, along with the force-multiplying effects of stealth and precision munitions, enabled air planners to design a strategy in which the initial phases could be executed simultaneously. This parallel-attack strategy greatly enhanced the disruptive effects of the air campaign against Iraqi systems.⁴⁴

Brigadier General Glosson's air campaign strategy reflected the political and military leaderships' resolve to produce a plan of unmatched efficiency. Specific objectives, overwhelming force, and new technologies contributed greatly to Coalition success. Desert Storm demonstrated the perfect mating of policy, doctrine, and resources.

ALLIED FORCE ANALYSIS

The NATO planners of Operation Allied Force produced a plan with specific phases of employment. However, this plan was plagued by political fixation on tactical targets at the expense of strategic objectives.⁴⁵ One of the greatest limitations military strategists faced was the lack of clear political objectives. Political objectives were not forthcoming until 24 March 1999, the day the air war began. U.S. military objectives expressed by the Secretary of Defense and Chairman of the Joint Chiefs of Staff on 24 March 1999 were as follows: deter further action against Kosovars; reduce ability of Serbian forces to attack the Kosovars; attack Serbian air defense with minimal collateral damage and civilian casualties; and, failing to deter Milosevic in the near term, diminish his ability to wage war in the future.⁴⁶

THREATS TO NATIONAL SECURITY INTERESTS

U.S. military objectives were established to protect several critical NATO interests: First, Serbian aggression directly threatened peace throughout the Balkans and the stability of NATO's southeastern region. Second, Belgrade's repression in Kosovo created a humanitarian crisis of staggering proportions. Finally, Milosevic's conduct leading up to Allied Force directly challenged the credibility of NATO, an alliance that has formed the foundation of transatlantic

security for fifty years.⁴⁷ These threats, albeit severe, did not directly compromise U.S. national security interests.

The National Security Strategy lists three categories of national interests, which must be clearly jeopardized to warrant U.S. military actions. *Vital* interests include those of overriding importance to the safety of our nation. *Important* national interests affect our nations well-being. *Humanitarian and other* interests demand our involvement based on values. U.S. involvement in the Kosovo crisis constituted support of *humanitarian and other* interests. The NATO community is hospitable to U.S. values, so U.S. membership warrants American involvement.⁴⁸ However, most Americans favor support of *vital* interests over *humanitarian and other* interests.

NATIONAL SECURITY DECISION MAKING AND POLICIES

The Supreme Allied Commander in Europe (SACEUR) during Allied Force, U.S. General Clark, worked within a NATO alliance that inhibited quick and effective application of U.S. military force. NATO leaders, to include Secretary General Solana, opted for the gradual escalation of violent attack, and thereby approved only segmented, incremental targeting of sensitive strategic sites.⁴⁹ Lieutenant General Short, Joint Force Air Component Commander, expressed his disapproval of NATO's indecisive approach in attempts to achieve military objectives. Short claimed that the only way to stop Milosevic's ethnic cleansing was to place a dagger in the Serb leadership's heart as quickly and decisively as possible. General Clark sympathized with his air component commander's frustrations, but noted that political constraints affected the alliance's operations.⁵⁰

Keeping the 19 countries of NATO coalition together was U.S. Secretary of Defense Cohen's hardest job during Operation Allied Force. He stated that, acting unilaterally, the U.S. would have conducted Allied Force differently, but the only way the operation could succeed was to acquiesce with our NATO allies. The task of gaining 19-nation consensus produced numerous bumps in the road, especially with respect to the decision not to use a ground forces. Secretary Cohen stated that an attempt to put a ground campaign together would have detracted from the consensus that existed for an air campaign. As Milosevic continued his barbaric ethnic cleansing, NATO contemplation of a ground initiative would have detracted from the air campaign and jeopardized NATO's cause.⁵¹ Thus the need for NATO consensus inhibited execution options for U.S. military leaders.

MILITARY DECISION MAKING AND STRATEGY

The air campaign was designed to initially achieve air superiority, followed by selected strikes against targets providing reinforcement to Serbian forces. The next phase expanded air

operations against a wide range of high-value military targets.⁵² Allied air quickly achieved air superiority, so airpower assets could operate freely over the FRY.

The air campaign's slow start can be attributed to NATO's multi-nation restraints. These restraints were made public following a NATO summit held in Washington D.C. on 23 April 1999. At the summit, NATO leaders approved additional aircraft up to a force exceeding 800 and lifted pre-existing air-space restrictions. These changes allowed coalition aircrews a 360-degree attack axis against Milosevic.⁵³ During the course of the campaign, NATO developed mechanisms for delegating target approval authority to military commanders. For very select categories of targets, such as those involving high collateral damage, approval authority rested with senior political NATO leaders.

The internal command relationship of NATO had a significant impact on the planning and execution of the operation. These relationships had never before been called up to plan and conduct sustained combat operations. The parallel U.S. and NATO command and control structures and systems complicated operational planning and maintenance of unity of command. The friction between existing NATO and U.S. command and control systems slowed the air campaign and detracted from its effectiveness.⁵⁴

FORCES AND TECHNOLOGIES

New technologies were tested and executed throughout Operation Allied Force. UAVs from multiple nations were employed in unprecedented numbers. The U.S. Navy's Pioneer, the Army's Hunter, and the Air Force's Predator achieved combat successes in both reconnaissance and offensive operations. The B-2 bomber and Joint Direct Attack Munitions (JDAM) combination achieved exceptional successes. All-weather B-2s launched from Whiteman AFB, Missouri, flew round-trip, non-stop to Serbia proper. Sixteen JDAMs per B-2 were dropped from 40,000 feet, achieving 100% mission success with zero combat losses.⁵⁵

However, the lack of available airpower assets at the start of Operation Allied Force limited the degree of attack and contributed to NATO's strategy of gradual escalation. In late April, the dramatic increase of available NATO airpower resources, coupled with availability of precision-strike munitions, afforded NATO the capability to strike more persuasive blows.

EVALUATION OF DESERT STORM AND ALLIED FORCE

The successes of these two conflicts hinged on the effectiveness of their respective air campaigns. The air campaigns were heavily influenced by declarations from political leaders prior to conflict. These declarations drove processes which impacted several facets of air campaign execution, ranging from tactical planning to strategic targeting. Measuring a military's

ability to execute in combat, against its operating fundamentals, clearly reveals strengths and weaknesses. Using two of the U.S. Army's nine principles of war, objective and unity of command, (see U.S. Army Field Manual 100-5) we can evaluate the strengths and weaknesses of the two air campaigns.

FM 100-5 cites nine principles of war to provide general guidance for the conduct of war at the strategic, operational, and tactical levels. It asserts that every military operation should be geared toward a clearly defined, decisive, and attainable objective. FM 100-5 declares for all levels of war that forces should be massed toward a common objective with total unity of command.⁵⁶ Close examination of the two conflicts, with respect to objective and unity of command reveals some significant differences.

DESERT STORM-OBJECTIVE

President Bush clearly articulated his desired end state for Kuwait, the removal of the Iraqi Army from the KTO and the reestablishment of the legitimate government of Kuwait. Military strategy constantly focused on this objective for the duration of Operation Desert Storm. General Schwarzkopf sought to gain control of the air, use airpower to isolate and debilitate the Iraqi Army, and finally employ ground forces to drive the Iraqi Army from Kuwait.⁵⁷ Brigadier General Glosson and his planners were able to rely on clear, consistent strategy as guidance for the duration of the conflict. The focus of the air campaign withstood the challenges of mission creep, Coalition conflict over targeting, and premature launching of the ground phase to the campaign. On 27 February 1991, hostilities ceased as a result of an efficient, synergistic, multi-phase plan. Every phase of the plan fused in conjunction with adjacent phases, taking into account second and third-order effects to achieve the desired political end state. This unwavering political end state, clearly set forth by President Bush, provided Desert Storm with purposeful direction from start to finish.

DESERT STORM-UNITY OF COMMAND

Lieutenant General Chuck Horner served as Desert Storm's Joint Force Air Component Commander, with authority to direct all air assets in pursuit of the published military strategy. Horner staunchly advocated centralized control and decentralized execution, so he charged his air planners to centrally manage the ATO. This command structure process yielded maximum flexibility for day-to-day air campaign execution. The Desert Storm ATO, listing every air resource committed to combat, provided a reliable control mechanism for the most efficient utilization of all available Coalition airpower assets. The Joint Target Coordination Board selected targets for placement on the ATO. This Board provided an open forum for target

nomination from all Coalition members and services. The JFACC, with requisite authority, employed airpower in a unified manner to satisfy the needs of the theater commander's strategy.⁵⁸

ALLIED FORCE-OBJECTIVE

President Clinton voiced political objectives for Operation Allied Force on 24 March 1999, the day the air campaign commenced. These objectives were late in arriving and poorly defined. President Clinton specified three objectives: First, demonstrate NATO's opposition to aggression. Second, deter Serbs from attacking helpless Kosovar Albanians. And finally, damage Serbian capacity to wage war. The first objective seems ambiguous and of questionable relevance to U.S. vital interests. The U.S. public understood very little about problems in Kosovo; these remote activities posed little in the form of a "tangible" threat to American citizens. The second objective would be difficult to secure with a strategy calling for the use of airpower alone to deter Serbian attacks against unprotected Kosovars. This strategy proved inefficient. Many would argue that NATO bombing in Serbia actually motivated Yugoslav soldiers to accelerate the ethnic cleansing process. Without doubt, ethnic cleansing continued after bombing was initiated: As many as 100,000 Kosovars were murdered from 24 March until the end of the campaign. Clinton's final objective produced significant damage to Yugoslavia industrial and communications infrastructure; however, Serbian land forces remained intact. Milosevic's ground forces remained sturdy, providing the bedrock of Serbia's military strength.

Military leaders were unable to construct a coherent targeting strategy during the conflict to support the alliance's objectives. The targeting strategy failed when politically sensitive targets were withheld by politicians within the alliance. NATO initiated precision bombing at the conflict's onset. However, this bombing was limited to a narrow band of targets and lacked intensity. NATO early restraint denies the Allies the element of shock. Allied Force's ATO failed to accurately disclose all assets involved in daily strikes and often reflected attacking assets as "U.S. only." This mislabeling masked new U.S. technologies in an attempt by U.S. planners to diffuse publicity over the technological gaps that existed between U.S. and European weapon systems. Concealment of available assets generated confusion and clouded attempts at mating *means* with *ends*. NATO's air campaign lacked cognate intensity, freedom to target militarily valued sites, and disciplined order. Many critics of Allied Force claim this air campaign consisted of tactics, followed by more tactics, followed finally by tardy strategy.⁵⁹

ALLIED FORCE-UNITY OF COMMAND

Lack of unity of command dramatically impacted the day-to-day execution of Operation Allied Force. SACEUR General Wesley Clark admitted achieving consensus with the air forces of 13 contributing NATO countries as difficult. The U.S. provided the majority of aircraft used for offensive operations versus Milosevic, but General Clark was limited in his ability to apply airpower in a manner conforming to U.S. airpower doctrine. The timing, targeting, and mass of applied airpower was limited by NATO politicians. These political constraints proved divisive. The unfortunate attack on the Chinese Embassy prompted the 19 nations of the North Atlantic Council to defer to individual national sensibilities rather than to target for strategic effect.⁶⁰ General Clark lacked sufficient authority over military assets to achieve NATO's desired end state. Given its ambiguous strategy and target selection by committee, Operation Allied Force proved to be rather ineffective.

CONCLUSION

The air campaigns of Desert Storm and Allied Force differed significantly in their different applications of strategy and their observance of two critical principles of war. The Mowbray Strategy/Process Analysis vividly reveals the strengths and flaws of the two air campaigns. Political issues and the application of air power doctrine led to enormous disparity in the efficiencies of both campaigns.

Desert Storm planners, unlike Allied Force planners, enjoyed the freedom to operate without political constraints in the application of airpower doctrine. Both campaigns had access to similarly staggering resources, yet each campaign's productivity differed significantly. Stealth bomber and cruise missile technology produced highly successful results in Desert Storm. B-2 missions with Joint Direct Attack Munitions, JSTARS, and UAVs achieved unmatched triumph during Allied Force. The massive and timely application of airpower against Iraq's critical centers of gravity and the coherence of the entire campaign plan produced a stunning achievement in Desert Storm. The incoherent targeting process and failure to target Serbian centers of gravity in a timely manner, produced results similar to the ones delivered in Vietnam's Rolling Thunder. Gradual escalation of airpower, used as the primary military means to compel Milosevic to yield, proved a "high cost-low benefit" endeavor.

Objective and unity of command are two critical principles of war which, applied to Desert Storm and Allied Force, reveal the challenges U.S. forces faced in recent Coalition operations. Desert Storm commenced with clearly defined objectives, which took into account political, economic, and military restraints impacting mission execution. Operation Allied Force started

without clear objectives but was plagued by political fixation on tactical targets at the expense of strategic objectives.⁶¹ Desert Storm benefited from the command authority of General Norman Schwarzkopf, who enjoyed the advantage of commanding a U.S.-led Coalition free of inappropriate political meddling. The combatants of Operation Allied Force served under SACEUR General Wesley Clark, who bore the responsibility of implementing the NATO led coalition. Air forces from 13 contributing NATO countries participated in the battering of Slobodon Milosevic's forces. On numerous occasions, at the last minute and without warning, one or two nations would veto a target, causing launched airplanes to be recalled, wreaking havoc on the mission commander's plan.⁶² Such were the tensions between military planners and leaders and the desires of NATO's political masters. Allied Force's JFACC, Lieutenant General Short testified before the Senate Armed Services Committee on his dissatisfaction over not gaining approval, early in the campaign, to strike political headquarters in downtown Belgrade.⁶³ Prudent campaign air planners will always aspire to interweave the complex elements of policy, doctrine, and resources into a coherent plan that embraces objective and unity of command. Desert Storm was an air planner's dream. Allied Force, an air planner's nightmare.

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